

1971 DECUS-AUSTRALIA SYMPOSIUM

The Data Acquisition and Control System for the Faculty of Engineering, University of Sydney by R. H. Frater, R.E. Luxton and D. G. Wong

Computer Language for Control Engineers by R. Worthington

A Real-Time Totalisator - Hardware Description by G. Klemmer

A Real-Time Totalisator - Software Analysis by R. Sterndale-Smith

SNEDAC - A Data Acquisition Computer for System Monitoring, Identification and Control by L. Kemeny

PDP-8 As An Experimental Interface to a Large Computer by J. B. Millar

Small Digital Computers for the Control of Mineral Processing Plants by M. Lees

Auto-Analyzer Data Acquisition System by G. T. Bentley and M. H. Abernethy

MUDBOS - A Mutli-Device Buffered Output System by M. H. Abernethy and G.T. Bentley

Computers in Psychology by G. Coleman

Seismic Processing with a PDP-15 by D. W. King

Array Processing with a Fixed-Head Disk by I D. G. Macleod

An Economical Decision Table Subroutine for PDP-8 Assembly Language Programs by J. C. Cockram

Studies of Ionic Solution Equilibria by H. Kinns and D.D. Perrin

Off-Line Application of a PDP-8/S Computer to X-Ray Fluorescence Analysis by R. A. Davies

The Use of a PDP-8/I in Teaching Forestry Students at the University of Canterbury by A.D.G. Whyte

System Software Developed at A.R.L. for the PDP-10 by L. H. Mitchell

Implications of a New Command Structure by R.A. Cook

Error Reporting System for the I/O Devices on the PDP-10 by D.J. Seddon

A Generalised Software System for Improved Core Utilisation for PDP-8 Computers by F. Lewin

An Improved Chaining System for the PDP-9 by J. Edwards

The Development of a Time-Sharing Monitor for an 8K PDP-9 by P.R.A. Rutter

Some Aspects of the Use of a PDP-10 Installation In a Small University by I.M. Hunter

The Development of Interactive Teaching Aids a Problem Oriented Language for Hydraulics and C.A.I. for Engineering Economics by K.P. Stark

Some Aspects of Real-Time Information Systems for Libraries, Based on Time-Sharing Computers by D. J. Abel

The CSIRO Computing Network by C. Gilbert

SEVENTH EUROPEAN SEMINAR (1971)

- A Heuristic, Learning Programme for the Direct Control of a Plant by S. Assilian
- Experimntnal Telephone Inquiry System by J. B. de Jong
- A Computer Based Test System for Electronic Components and Modules by A. Sclater
- Automated Psychological Tests; Key Concepts Advantages and Limitations by A. Elithorn and J. James
- DECTape Software for a PDP-7 by R. J. Cowe
- PDP-15/30 Utilities by M. J. Davey
- A Multiprogramming Operating System for the PDP-9 by I. H. Gould and P.L. Higginson
- Software Developments for Small Computers by H. Cristen and P. A. Staub
- File-Handling System for General Laboratory Work by C. Reutersward
- Invisible ODT with Tracing Facilities by B. Runge and J. V. Olsen
- Organization of the BEA PDP-10 by T. Ashby
- An Alternative Use of PDP-10 Re-Entrant Hardware by C.J.B. Hawkins
- Statistical Data on the PDP-10 Monitor Performance by E. Ziegler and K. Boll
- Rubber Materials Blending and Mixing System by A. Luffman
- Blutalkohol Analyse Mit Direkter Computer Auswertung (Comupter Blood Alcohol Analysis) by H. J. Battista
- On-Line Identification of a Packed Distillation Column Using a Digital PDP-12 Computer by A. Palmer and J. D. Boyle
- Software and Hardware for a DEC PDP-15 or PDP-9 Computer to Enable The VP 15A CRT To be Used with Refresh Points and Also in an Interactive Mode by S. B. M. Bell
- Graphics and the Small Computer by M. H. Choudhury
- A Model of a System for Retransmission of Multi Address Messages by W.R. M. Kok
- A Flexible Interactive - Display Generating Subroutine for the PDP-12 or LINC-8 by C. M. Malpus
- A Handler for Collecting Time Dependant Data by H. P. Hougardy
- Various Algorithms for Storage of Random Events in a Real-Time System by C. Zeelenberg, A. C. Miller, and W. A. H. Engelse
- Automatic On-Line Analysis of Electromyographic Data with a PDP-12 Computer by J. Bergmans
- Measuring Impulse Responses Using Pseudorandom Binary Noise and Cross Correlation by H. L. Steinberg
- The Fast Fourier Transform and Its Use by H.R. de Johgh, E. de Boer
- Multichannel On-Line Fast Fourier Analysis by P.V. Pocock, R. Cooper, and W. J. Warren
- The Display of Planar Vectorcardiograms and the Calculation of Planar Vector Angles and Magntidues in the Horse by J. R. Holmes
- A System for Data Gathering and Handling in Neurophysiology by F. H. Bostem

SEVENTH EUROPEAN SEMINAR (1971) (Continued)

An Interactive Communication System for an Intensive Care Unit by A.C. Miller, W.A. H. Engelse, and C. Stillbroer

Using a Transient Recorder with a LINC-8/PDP-8 by C. C. Wilton-Davies

Data Acquisition in the Field of Fluid Dynamics by a PDP-15/20 with Disk Pack Mass Storage by E. von Koenig and W. Draemer

Recording with a TV-Camera into the PDP-8's Core Memory by E. Froeschle, H. Sotta, and K. H. Rackette

A GLC-Quarupole Mass Spectrometer - PDP-8/I by R. Hallett and J. Farren

On-Line Plasma Diagnostics at MHD Generator Vegas Using LAB-8 by P. Schabel Chr. Holzapfel and K. Rawatsch

A PDP-8 Controlled Servo-Drive For Measuring Machines by M. L. Retter and M. Flinn

An On-Line Digital Correlator Using a Mini-Computer by J. G. Carruthers

Multichannel Analyzing Programs for a PDP-8/L by J. Renuart and Y. Longree

A PDP-11 Multichannel-Analyzer System with Real-Time Data Analysis for Temperature Control by Nuclear Means by R.E. Silverans, L. Vanneste and E. Vermeulen

A Command Language for Pulse Height Analysis by T. Schulze, T. Schlurick and H. J. Trebst

Calcplot: A Conversational Language for the LINC-8 and PDP-12 for Statistical Calculations and Graph Plotting by H. Bostock

Implementation of BCPL on the PDP-10 by B. O'Mahoney

Standardization of Basic by G. M. Bull

Design and Implementation of 800 Kilobit/sec. Data Links between Remote Small Computers and a Central PDP-8 Message Concentrating System by G. Phillips and D. Harvey

Implementation of a PDP-15 Dual Computer System by C. Corge

Core Sharing Facilities on a PDP-6/PDP-10 Dual Processor System by T. P. Kokott

An On-Line High Speed Computer Link by I. G. Dewis

The Linked PDP-10/ICLI900 Computer Configuration at the University of Essex by B. O'Mahoney

The Advantages of a Single Bi-Directional Highway (UNIBUS) in a Peripheral Pre-Processor A. W. Nicholson

BLISS-11: An Implementation Language for the PDP-11 by R. F. Brender

FIFTH CANADIAN (1971)

Precis of Welcoming Speech given by Mr. Denzil Doyle

Report on the Formation of DECUS-Canada for the 5th DECUS Canadian Symposium

Report of Working Session on Direct Numerical Control

A Novel Approach to Numerical Control Systems by L. A. Thomas, D. K. Roberts, and E. J. Bourque

Report of Working Session on Education I

Bincard and Algonquin Assembler Solve Classroom Throughput Problems by R. W. Southern

Report of Working Session on Special Peripherals

INDAC-8 by D. Sheppard

Report of Working Session on Diagnostics

TEST - An Engineering Oriented Compiler by Irwin Lewis

Report of Presentation on 18-Bit Machines by K. Vonasek

Report of Working Session on Graphics

Modular Graphics Hardware? by P. A. V. Thomas

Report of Working Session on 16-Bit Machines

RSX-15 Real Time Executive For On-Line Process Control by K. Vonasek

Report of Working Session on Education II

Report of Working Session on Analogue/Digital Conversion

Analog to Digital Convert Interfaces for PDP-8 Computer by J. R. Saltvold

Digital and Analysis of Analog signals in PDP-10/50 Time Sharing Environment by R. Chauhan and C. Forsberg

SPRING 1971 DECUS SYMPOSIUM

PS/8 BASIC by Don Baccus and G. Hoeren

The Kludge Programming Language by Barry Smith

TECO-8 for PS/8 by Don Baccus and Barry Smith

Improvements to the Sked Processor Control Software System by Andrew Walker and Arthur G. Snapper

TEXT12: A General Purpose Text Processor by E. Walter and W. E. Hammond

ISAR of GEMISCH by W. E. Hammond

BLISS-11: An Implementation Language for the PDP-11 by R. F. Brender

MANTIS: A Natural Debugging Aid for PDP-10 FORTRAN by L. Salmonson, R. Heilman and G. Ashby

SPRING 1971 DECUS SYMPOSIUM (Continued)

Dimensional Checking of Equations in Algebraic Computing Languages: An In Situ Method by H. C. Howland and S. Rhine

IBIOS -- An Interactive Buffered Input-Output System for the LINC-8 by R. L. Stout
Foreground/Background/8 with 8K or More for Background Use by N.S. Kendrick, Jr.

A Simple Monitor for Disk Storage of FOCAL Programs with Flexible Subroutine Linking by M. T. Kelly

A Software System for a PDP-8/I Mobile Remote Station by Marvin L. Zeichner

RSX-15 Real Time Executive by H. Krejci

Son of Zoro: A Second Generation Multi-programming System for Psychological Research by J. L. Lewis and G. W. Osgood

The PDP-9 Background/Foreground Environment at Lowell Technological Institute Nuclear Center by R. Hully, D. Donati, C. DeLizza and S. Mathur

Conversational Monitor-8 by John Elder

On-Line Detection of EEG Spindle Activity by R.S. Grabow and E. H. Ellinwood, Jr.

Spike Train Analysis on a PDP-12 by M.S. Denny, C.F. Lam and S. Katz

On-Line Digital Filtering Using PDP-8 or PDP-12 by M.A. Soderstrand

The Use of a Mini-Computer for Data Preprocessing in Statistical Analysis by John W. Lane, J.W. Starr, F. Doresey and H. K. Thompson

Calorimetry Data Acquisition and Control by J. C. English

ISOID - An Isotope Identification Program for a 16K PDP-9/15 Computer by D. R. Donati and S. C. Mathur

Acquisition and Display of Nuclear Medicine Image Data with a DEC PDP-15/20 Computer by W. K. Legler, W. F. Herrin, R. G. Robinson and A.W. Templeton

A Universal Serial Interface for Data Set, Teletype, and Intercomputer Connection by R. C. Barrett and W. J. Lennon

The Computer-Operated Resistivity Test Set by W. H. Knight

A Machine Aided Scheme for Frame Film Data Extraction by Ernest H. Hayden

A Digital Timing Device for a Hybrid Computing System

Management Problems of Large System Developments on Small Computers by Richard Zapolin

Formation Meeting of a Special Interest Group: Laboratory Users of Digital Equipment Computers by Marshall Melin

Report On Educational Users Special Interest Group Formation Meeting by D. S. Harmer

Report of FORTRAN Working Session by S. R. Shapiro

Report on the Installation Management Working Session by G. Lanphere

PDP-9/15 Background/Foreground Workshop and Advanced Software Workshop by Russel Geiseman and F. R. Sias, Jr.

SPRING 1971 DECUS SYMPOSIUM (Continued)

PDP-8 Disk Monitor System Workshop by W. J. Lennon and R. C. Barrett

Summary of the Working Session on "Inexpensive Mass Storage Devices for Use with Mini-Computers" by J.J.H. Park

Report of Batch Working Session by J. R. Mager

Operating the Keyboard Monitor from Disk or Drum Using DECtape or Magtape by R.C. Davies

Optical Scanning Products Demonstration System by W. F. Mayhew and D. A. Cassell

FALL 1971 DECUS SYMPOSIUM

SMART: A Multiple-High-Segment Executive System by W. H. Moore and A. S. Cooperband
CCBS 10/50 Monitor Cataloguer by Peter S. Baker

RAMEM - Random Access Magtape Entry Method by D. L. Feinberg

Making an Existing System Process Structured by D. J. Black

LINC-8 Sampling and Analysis of Rheoencephalography Waveforms by J.W. Lovett-Doust, W. D. Payne, R. Sadana and J. Watkinson

Answer - Algorithm for Non-Synchronized Waveform Error Reduction - A Biomedical Adaptive Filter for the LAB-8 Computer by S. E. Robinson

A Simple Technique of Beam Generation for the RAD 8 by P. N. Shrivastava

The Segmentation of Speech Sounds by Joel Marshal Norvell

Computer Aided Analysis of Single Motor Unit Muscle Action Potentials by R. J. Hanson

Health Science Research and Health Care Delivery Analysis with a Small Computer by Bruce A. Borass

A Proposed Interactive Graphics System for Classroom Use in the Engineering Sciences by G. Kleiner

Graphics Software for Two-Dimensional Filling by R. Sedgewick

Television as a Computer Peripheral by H.D.J. Covey, W. Hall, A.C. Adelman, C.H. Felderhof, P. Mendler, K.W. Taylor and E. D. Wigle

Computer Graphics Today by R. C. Larkin

Report of Formation Meeting on Special Interest Group in Interactive Graphics (SIGIG)

Master Controller for an Electric Thrust Subsystem by H. M. Doupe' and Tad Macie

A PDP-8 (ISL-8) Study of The Physiological Simulation Benchmark Experiment by R. Benham

Cut-Off Error Propagation in Digital Simulation by A. Feingold and K. G. Gupta

Seven "Micros" Equal One Mini by A. Bouley, D. Carlin, I. Etter

High Speed Secondary Storage for PDP-8/I Via Magnetic Tape Interface by J. Mercurio and R. C. Larkin

FALL 1971 DECUS SYMPOSIUM (Continued)

Digital Cassettes - A Case History by A. Hillman and H. Wochholz

Assembling and Programming A Single Telephone Line Communications Package for the PDP-8/S Computer by R. R. Plum

Alternative RJE's: Two Remote Job Entry Terminal Software Systems by Sheridan Bentson

Development of a Household Software Package by R. A. Wong

Yet Another Photopeak Analysis Program for the PDP-9 Computer by L. V. East

Oliver - An Interactive Data Management and Information Retrieval System by D.M. Moyles

Easydata - A Conversational Management Information System for DECsystem-10 by Campbell Sayers

A Stored Program Channel Processor for CAMAC by R. W. Bercaw

EDITDT - An Analog Data Acquisition, Display and Editing Software System by J. A. Miller and T. L. Drake

Telemetered Profiling Isotopic Snow Gauge by E. W. Killian and R. A. Coates

Computer Self-Checking by A. L. Connelly and G. O. English

MTI. - A 9-Track Magtape IBM/360 File Handler for the PDP-9/15 Advanced Monitor System by Paul T. Ward

Using a PDP-15/40 As An Aid to Debugging A Large Real Time Machine by B. J. Albanese and Irving Benyacar

POP-2: A "Computer Scientist" Language for DECsystem 10 by C. Sayers

Waterloo FORTRAN For PDP-9/15: Report 2 by J. A. Smith and J. A. Field

RASP by Gary M. Cole

Faster FORTRAN IV on the PDP-11: Hardware Floating Point by G. P. O'Leary

Computers Invade Space (Theatre) by R. K. Copeland, P. R. Beck and L. Skolnick

Peripheral Devices and Decision Making on a Small Computer by M.S. Cole, R.C. Davies, and G. O. English

A Simulator for the PDP-8 Positive Logic I/O Bus by D. Harmer, B. Statham, J. Alderman, and D. McLain

Report on The Education Workshop

Special Interest Group in Education

The Training of Teachers in the Use of Computers in the Classroom by P. McGinley

Digital Simulation in Education by L. Braun

Assessment as a Tool for Curriculum Development a Case Study of the Greece, New York, Mathematics Assessment Process by D. J. Heisey

The Computer in Teaching Mathematics and Science in the Community College by Milton H. Hoehn